

I. Listing of Claims

This listing of claims will replace all prior versions of claims in the application.

1. (Currently Amended) A computerized method for processing a query directed to a multidimensional database comprising:

determining a [hierarchical context] subset of the database for each member of an input data set specified by the query; and

processing the query using [the non-calculated members specified by the input data set and] any calculated members of the database that is within [the hierarchical context of] at least one of the subsets of the database [the members of the input data set], without the query specifying any calculated members of the database.

2. (Original) The computerized method of claim 1 wherein processing the query includes generating an output data set to include the members of the input data set and the encompassed calculated members of the database.

3. (Original) The computerized method of claim 1, wherein processing the query includes processing the query with an OLAP server.

4. (Original) The computerized method of claim 1, further comprising performing the determining step and the processing step when the query includes an extension directing an OLAP server to include calculated members.

5. (Currently Amended) The computerized method of claim 1, wherein determining a [hierarchical context] subset of the database for each member includes identifying within a dimension of the database each member's siblings, the member's descendants and the descendants of the siblings.

6. (Currently Amended) A computerized method for processing a query directed to a multidimensional database comprising:

initializing an output data set to an empty set;

copying each member of an input data set specified by the query to the output data set;

for each respective member of the input data set, identifying a [maximal sub-hierarchy] subset of a dimension hierarchy that encompasses the corresponding member;

adding any calculated member of the database to the output data set when the calculated member is encompassed by an identified subset [sub-hierarchy], without the query specifying any calculated members of the database; and

processing the query using the output data set.

7. (Original) The computerized method of claim 6, wherein processing the query includes processing the query with an OLAP server.

8. (Original) The computerized method of claim 7, wherein each step of the method is performed when the query includes an extension directing an OLAP server to automatically include calculated members of the database.

9. (Currently Amended) The computerized method of claim 6, wherein determining the [maximal sub-hierarchy] subset for each member includes identifying within a dimension of the database each member's siblings, the member's descendants and the descendants of the siblings.

10. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method for processing a query directed to a multidimensional database, the method comprising:

determining a [hierarchical context] subset of the database for each member of an input data set specified by the query; and

processing the query using [the non-calculated members specified by the input data set and] any calculated members of the database that are within the [hierarchical context of] at least one of the subsets of the database [of the members of the input data set], without the query specifying any calculated members of the database.

11. (Original) The computer-readable medium of claim 10, wherein processing the query includes generating an output data set to include the members of the input data set and the encompassed calculated members of the database.

12. (Original) The computer-readable medium of claim 10, wherein processing the query includes processing the query with an OLAP server.

13. (Original) The computer-readable medium of claim 10, further comprising performing the determining step and the processing step when the query includes an extension directing an OLAP server to include calculated members.

14. (Currently Amended) The computer-readable medium of claim 13, wherein determining a [hierarchical context] subset for each member includes identifying within a dimension of the database each member's siblings, the member's descendants and the descendants of the siblings.

15. (Currently Amended) A computerized system comprising:
a processor and a computer-readable medium;
an operating environment executing on the processor from the computer-readable medium; and
an OLAP server executing within the operating environment and maintaining a multidimensional database, wherein the OLAP server processes a database query by determining a [hierarchical context] subset of the database for each member of an input data set specified by

the query; and including in the processing of the query [each non-calculated member specified by the input data set and] any calculated members of the database that are within the [hierarchical context of] at least one of the subsets of the database [members of the input data set], without the query specifying any calculated members of the database.

16. (Original) The computerized system of claim 15 wherein the OLAP server generates an output data set to include the members of the input data set and the encompassed calculated members of the database.

17. (Original) The computerized system of claim 15, wherein the OLAP server receives the query from an OLAP client application via a query processor.

18. (Original) The computerized system of claim 15, wherein for each member of the input data set the OLAP server identifies, within a dimension of the database, each member's siblings, the member's descendants and the descendants of the siblings.

19. (Original) The computerized system of claim 15, wherein the database is a relational database system.

20. (Currently Amended) A computerized method for processing a query directed to a multidimensional database, wherein the query specifies an input data set, the method comprising:

determining whether the query includes an extension directing an OLAP server to automatically exclude calculated members of the input data set during the processing of the query; and

based on the determination, processing the query using [the] non-calculated members specified by the input data set.

21. (Original) The computerized method of claim 20, wherein processing the query includes:

- initializing an output data set to an empty set;
- copying the non-calculated members of the input data set to the output data set; and
- processing the query using the output data set.

22. (Original) The computerized method of claim 21, wherein processing the query includes processing the query with an OLAP server.

23. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method of processing a query directed to a multidimensional database, the method comprising:

- determining whether the query includes an extension directing an OLAP server to automatically exclude calculated members of the input data set during the processing of the query; and

- based on the determination, processing the query using [the] non-calculated members specified by the input data set.

24. (Original) The computer-readable medium of claim 23, wherein processing the query includes:

- initializing an output data set to an empty set;
- copying the non-calculated members of the input data set to the output data set; and
- processing the query using the output data set.

25. (Original) The computer-readable medium of claim 23, wherein processing the query includes processing the query with an OLAP server.

26. (Original) A computerized system comprising:

a processor and a computer-readable medium;
an operating environment executing on the processor from the computer-readable medium; and
an OLAP server executing within the operating environment and maintaining a multidimensional database, wherein the OLAP server processes a database query by determining whether the query includes an extension directing the OLAP server to automatically exclude calculated members of an input data set; and based on the determination, processing the query using only the non-calculated members specified by the input data set.

27. (Original) The computerized system of claim 26 wherein the OLAP server initializing an output data set to an empty set, copies the non-calculated members of the input data set to the output data set, and processes the query using the output data set.

28. (Original) The computerized system of claim 26, wherein the OLAP server receives the query from an OLAP client application via a query processor.

29. (Original) The computerized system of claim 26, wherein the database is a relational database system.

30. (Currently Amended) A computerized method for processing a query directed to a multidimensional database comprising:

parsing a received query to identify whether the query contains a query extension that indicates specifically how calculated members should be handled in processing the query;

when a query directive is identified that directs that calculated members be excluded from the output of the query then processing the query using the non-calculated members specified by the input data set; and

when a query directive is identified that directs that calculated members be included in the output of the query then performing at least the steps of:

determining a [hierarchical context] subset of the database for each member of an input data set specified by the query, and

processing the query using [the non-calculated members specified by the input data set and] any calculated members of the database that is within the [hierarchical context of] at least one of the subsets of the database [members of the input data set], without the query specifying any calculated members of the database. [; and]

31. (Currently Amended) The computerized method of claim 30 wherein processing the query [using the non-calculated members specified by the input data set and any calculated members of the database] includes generating an output data set to include the members of the input data set and the encompassed calculated members of the database.

32. (Currently Amended) The computerized method of claim 30, wherein processing the query [using the non-calculated members specified by the input data set and any calculated members of the database] includes processing the query with an OLAP server.

33. (Currently Amended) The computerized method of claim 30, wherein determining a [hierarchical context] subset for each member includes identifying within a dimension of the database each member's siblings, the member's descendants and the descendants of the siblings.

34. (Newly Added) A computerized method for processing a query directed to a multidimensional database comprising:

receiving a query specifying an input data set, the query indicating that calculated members of the database be used, and the query not specifying any calculated members of the database;

determining a subset of the database for each member of the input data set specified by the query;

identifying if there are any calculated members of the database corresponding to the subsets of the database; and

processing the query, if there are any calculated members of the database corresponding to the subsets of the database, using the identified calculated members.

35. (Newly Added) The computerized method of claim 1, wherein processing the query further comprises using the non-calculated members specified by the input data set.

36. (Newly Added) The computer-readable medium of claim 10, wherein processing the query further comprises using the non-calculated members specified by the input data set.

37. (Newly Added) The computerized system of claim 15, wherein the server further processes each non-calculated member specified by the input data set.

38. (Newly Added) The computerized method of claim 30, wherein processing the query further comprises using the non-calculated members specified by the input data set.